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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/099,607	03/15/2002	Michael R. Krause	10004123-1	5565

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EXAMINER
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BILGRAMI, ASGHAR H

ART UNIT	PAPER NUMBER
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2143

DATE MAILED: 11/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/099,607

Applicant(s)

KRAUSE, MICHAEL R.

Examiner

Asghar Bilgrami

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-66 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 March 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>03/17/2005</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Claim Objections***

1. The examiner withdraws the objection in light of the amendments made by the applicant to the objected claims.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (U.S. 5,850,388) and Deng et al (U.S. 6,701,432B1)

4. As per claims 1, 19, 37, 42 & 49 Anderson disclosed a network system comprising: links; end stations coupled between the links, wherein types of end stations include endnodes which originate or consume frames and routing devices which route frames between the links (col.1 & col.2, lines 1-60). However Anderson did not explicitly disclose in detail wherein at least one end station includes: an access control filter configured to restrict routes of frames from at least

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one end station on a selected routing path based on a selected frame header field including at least one of a next header field and an opcode field.

In the same field of endeavor Deng disclosed wherein at least one end station includes: an access control filter configured to restrict routes of frames from at least one end station on a selected routing path based on a selected frame header field including at least one of a next header field and an opcode field (col.6, lines 4-23 & col.7, lines 6-31).

At the time the invention was made it would have been obvious to one in the ordinary skill in the art to incorporate access control filtering capability as taught by Deng on an endstation in a network as taught by Anderson in order to safeguard the network against intrusions resulting making the network robust and efficient by routing data packets to their appropriate destinations intelligently.

5. As per claims 2, 20, 39 & 50 Anderson-Deng disclosed the network system of claim 1 wherein the at least one end station includes at least one routing device (Anderson col.1 & col.2, lines 1-60).

6. As per claims 3, 21, 38, & 51 Anderson-Deng disclosed the network system of claim 2 wherein the at least routing device includes at least one switch (Anderson col.1 & col.2, lines 1-60).

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7. As per claims 4, 22 & 52 Anderson-Deng disclosed the network system of claim 2 wherein the at least routing device includes at least one router (Anderson col.1 & col.2, lines 1-60).
8. As per claims 5, 23 & 53 Anderson-Deng disclosed the network system of claim 1 wherein at least one end station includes at least one endnode (Anderson col.1 & col.2, lines 1-60).
9. As per claims 6, 24, 43 & 54 Anderson-Deng disclosed the network system of claim 1 wherein the at least one endnode includes at least one processor endnode (Anderson col.1 & col.2, lines 1-60).
10. As per claims 7, 25, 44 & 55 Anderson-Deng disclosed the network system of claim 6 wherein at least one processor endnode includes a network interface controller which includes the access control filter (Deng, col.6, lines 4-23).
11. As per claims 8, 26, 45 & 56 Anderson-Deng disclosed the network system of claim 1 wherein at least one endnode includes at least one input/output (IO) adapter endnode (Anderson col.1 & col.2, lines 1-60)

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12. As per claims 9, 27, 46 & 57 Anderson-Deng disclosed the network system of claim 8 wherein at least I/O adapter endnode includes an IO adapter which includes the access control filter (Deng, col.6, lines 4-23).

13. As per claims 10, 28, & 58 Anderson-Deng disclosed the network system of claim 1 wherein the access control filter is implemented in hardware (Deng, col.6, lines 4-23).

14. As per claims 11, 29, 40, 47 & 59 Anderson-Deng disclosed the network system of claim 1 wherein the selected frame header field comprises a next header field (Deng, col.6, lines 4-23).

15. As per claims 12, 30 & 60 Anderson-Deng disclosed the network system of claim 11 wherein the access control filter restricts selected frame types indicated in the next header field from entering selected routes (Deng, col.6, lines 4-23).

16. As per claims 13, 31 & 61 Anderson-Deng disclosed the network system of claim 11 wherein the access control filter restricts raw datagram frames indicated in they next header field from entering selected routes (Deng col.7, lines 65-67 & col.8, lines 1-26).

17. As per claims 14, 32, 41, 48 & 62 Anderson-Deng disclosed the network system of claim 1 wherein the selected frame header field comprises an opcode field (Deng col.7, lines 6-31).

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18. As per claims 15, 33 & 63 Anderson-Deng disclosed the network system of claim 14 wherein the access control filter restricts routes of frames based on a type of operation being attempted as indicated in the opcode field (col.7, lines 6-31).

19. As per claims 16, 34 & 64 Anderson-Deng disclosed the network system of claim 15 wherein the type of operation being attempted is a management operation (Anderson col.1 & col.2, lines 1-60)

20. As per claims 17, 35 & 65 Anderson-Deng disclosed the network system of claim 15 wherein the type of operation being attempted is a data operation ((Anderson col.1 & col.2, lines 1-60).

21. As per claims 18, 36 & 66 Anderson-Deng disclosed the network system of claim 15 wherein the type of operation being attempted is a route update operation ((Anderson col.1 & col.2, lines 1-60).

***Response to Arguments***

22. Applicant's arguments with respect to claim 1-66 have been considered but are moot in view of the new ground(s) of rejection.

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*Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on M-F, 8:00-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



AB

Asghar Bilgrami  
Examiner  
Art Unit 2143



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